(FILE 'HOME' ENTERED AT 05:37:12 ON 28 NOV 2007)

FILE 'REGISTRY' ENTERED AT 05:37:17 ON 28 NOV 2007

L1 STRUCTURE UPLOADED

L2 8 S L1

L3 267 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 05:38:00 ON 28 NOV 2007

L4 7 S L3

L5 0 S US200!-551933/ASPPS

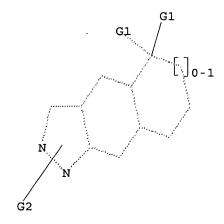
L6 6 S US200!-551933/APPS

FILE 'REGISTRY' ENTERED AT 05:38:34 ON 28 NOV 2007

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
C:\Program Files\Stnexp\Queries\10551933-amended.str
           Cb 8 1
chain nodes :
   19 20 26
ring nodes :
   1 2 3 4 5
                      8 9 10 11 12 13 15 16
ring bonds :
   1-2 1-5 2-3 3-4 4-5 4-6 5-9 6-7 7-8 7-10 8-9 8-13 10-11 10-15 10-16 11-12
   12-13
exact/norm bonds :
   1-2 1-5 2-3 3-4 4-5 4-6 5-9 6-7 7-8 7-10 8-9 8-13 10-11 10-15 10-16 11-12
   12-13
isolated ring systems :
   containing 1 :
G1:C,O,S,N
G2:[*1],[*2]
Match level :
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
   12:Atom 13:Atom 15:CLASS 16:CLASS 19:Atom 20:Atom 26:CLASS 27:CLASS
Generic attributes :
   19:
   Saturation
                         : Unsaturated
   Number of Carbon Atoms : less than 7
   Type of Ring System : Monocyclic
   20:
```

Saturation : Unsaturated Number of Carbon Atoms : less than 7 Number of Hetero Atoms : Exactly 1 Type of Ring System : Monocyclic

Element Count :

Node 19: Limited

C, C6

Node 20: Limited

C, C5 N, N1

```
ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
L7
AN
     2004:927012 CAPLUS
DN
     141:395547
TI
     Preparation of selective spirocyclic glucocorticoid receptor modulators
     Ali, Amjad; Balkovec, James M.; Beresis, Richard; Colletti, Steven L.;
IN
     Graham, Donald W.; Patel, Gool F.; Smith, Cameron J.
PA
     Merck & Co., Inc., USA
SO
     PCT Int. Appl., 201 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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                         _ _ _ _
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                                                                    <del>- - - - - - -</del> -
PΙ
     WO 2004093805
                          A2
                                20041104
                                            WO 2004-US12102
                                                                    20040419
     WO 2004093805
                                20051208
                          A3
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
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                                            AU 2004-232301
     AU 2004232301
                                20041104
                          A1
                                                                    20040419
     CA 2522946
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                                                                    20040419
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                                20060125
     EP 1617806
                          A2
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     CN 1809347
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                                20060726
                                            CN 2004-80017051
                                                                    20040419
     JP 2006524251
                          Т
                                20061026
                                            JP 2006-513140
                                                                    20040419
     US 2006217563
                          A1
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                                            US 2005-551933
                                                                    20051004 <--
     IN 2005DN04611
                          Α
                                20070928
                                            IN 2005-DN4611
                                                                    20051010
PRAI US 2003-464784P
                          Р
                                20030423
     WO 2004-US12102
                          W
                                20040419
os
    MARPAT 141:395547
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Ring A = carbocyclyl or heterocyclyl; m = 0-3; n = 0-2; R1 = (un)substituted-alkyl, -alkenyl, -alkynyl, -cycloalkyl, etc.; R2 and R3 independently = H, halo, alkyl, aryl, etc.; R4 = OH, CO2H, (un)substituted-alkyl, -Ph, etc.], as well as their pharmaceutically acceptable salts or hydrates thereof, are prepared and disclosed as selective glucocorticoid receptor ligands for treating a variety of autoimmune and inflammatory diseases or conditions. Thus, e.g., II was prepared via spirocyclization of III (preparation given) with Et α -bromomethyl acrylate. In human glucocorticoid receptor assays, I demonstrated a range of GR affinity with IC50 values between 10 μ M and 1 nM. Pharmaceutical compns. and methods of use are also included.

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN 2005:461153 CAPLUS <u>Full-text</u> 143:125827 Novel ketal ligands for the glucocorticoid receptor: in vitro and in vivo

Novel ketal ligands for the glucocorticoid receptor: in vitro and in vivo activity
Salth, Cameron J.; Ali, Amjad, Balkovec, James M., Graham, Donald M.;
Hammond, Milton L.; Patel, Gool P.; Rouen, Gregory P.; Smith, Scott K.;
Tata, James R.; Einstein, Monica; Ge. Lan; Harris, Georgianns S.; Kelly,
Theresa M.; Mazur, Paul; Thompson, Chris M.; Wang, Chuanlin P.;
Williamson, Joanne M.; Miller, Douglas K.; Pandit, Shipa; Santoro, Joseph
C.; Sitlani, Ayesha; Yamin, Ting-ting D.; O'Neill, Edward A.; Zeller,
Dennis M.; Carballo-Jame, Ester; Forrest, Michael J.; Luell, Silvi
Department of Medicinal Chemistry, Merck Research Laboratories, Rahway,
NJ, 07065, USA
Bioorganic & Medicinal Chemistry Letters (2005), 15(11), 2926-2931
CODEN: BMCLEs; ISSN: 0960-894X
Elsewier B.V.
Journal

English CASREACT 143:125827

A novel series of selective ligands for the human glucocorticoid receptor is described. Structure-activity studies focused on variation of B-ring size, ketal ring size, and ketal substitution. These analogs were found to be potent and selective ligands for GR and have partial agonist profiles in functional assays for transactivation (TAT, GS) and transrepression (IL-6). of these compds. three were evaluated further in a mouse LPS-induced TNF-a secretion model. Compound (1) had an EDSO of 14.1 mg/kg compared with 0.5 mg/kg for prednisolone in the same assay.
786708-06-3

786709-06-3
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT
(Reactant); TRU (Therapeutic use); BIOL (Biological study); RACT (Reactant
or reagent); USSS (Usea)
(novel ketal ligands for glucocorticoid receptor and in vitro and in
vivo activity)
786708-06-3 CAPLUS
Spiro(cyclopent(f)indazole-5(1H),2'-{1,3}dioxolane}, 4',5'-diethenyl-1-(4fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-, (4'R,4aS,5'R)- (CA INDEX
NAME)

Absolute stereochemistry.

10551933

3 of 22

614762-99-1P 736707-55-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (novel ketal ligands for glucocorticoid receptor and in vitro and in vivo activity)
614762-99-1 CAPLUS
Spiro(5H-benz(f)indazole-5,2'-[1,3]dioxolane]; 1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

786707-55-9 CAPLUS
Spiro(cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry

786707-79-8
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (novel ketal ligands for glucocorticoid receptor and in vitro and in vivo activity)
786707-70-8 CAPLUS
Spiro[SH-benz[f]indazole-5,2'-[1,3]dioxolane]; 4',5'-diethenyl-1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-, (4'R,4a8,5'R)- (CA INDEX NAME)

NAME)

Absolute stereochemistry

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786708-45-0P
RL: PAC (Pharmacological activity), PKT (Pharmacokinetics), SPN (Synthetic preparation); THU (Therapeutic use), BIOL (Biological study), PREP (Preparation); USES (Uses)
(novel ketal ligands for glucocorticoid receptor and in vitro and in vivo activity)
786708-45-0 CAPLUS
Spiro(cyclopent(f)indazole-5(1H),2'-[1,3]dioxolane), 4',5'-diethyl-1-(4-fluorophanyl)-4,4a.6,7-tetrahydro-4a-methyl-, stereoisomer (SCI) (CA INDEX NAME)

Absolute stereochemistry.

RL: PAC (Pharmacological activity), PKT (Pharmacokinetics), THU (Therapeutic use), BIOL (Biological study), USES (Uses) (novel ketal ligands for glucocorticoid receptor and in vitro and in vivo activity)
788708-33-6 CAPLUS

Spiro(cyclopent[f]indazole-5(1H),2'-[1,3]dioxane), 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',4a,6'-trimethyl-, (4'8,4a8,6'8)- (CA INDEX NAME)

Absolute stereochemistry.

10551933 4 of 22

ΙT

78E707-65-1P 786707-67-2P 786707-68-4P SE371-49-0P SE371-51-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); TMU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(novel ketal ligands for glucocorticoid receptor and in vitro and in

vivo accivity)
786707-65-1 CAPUJS
Spiro(SH-benz(f)indazole-5,2'-[1,3]dioxolane], 4',5'-diethyl-1-(4[luorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-. (4'R,4a5,5'R)- (CA INDEX
NAME)

Absolute stereochemistry.

786707-67-3 CAPLUS Spiro[5H-benz[f]indazole-5,2'-{1,3]dioxolane}, 1-{4-fluorophenyl}-1,4,4a,6,7-8-hexahydro-4a-methyl-4',5'-dipropyl-, (4'R,4aS,5'R)- (CA INDEX NAME)

Absolute stereochemistry.

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786707-68-4 CAPLUS Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxolane], 4',5'-dibutyl-1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-, (4'R,4a5,5'R)- (CA INDEX NAME)

Absolute stereochemistry.

858371-49-0 CAPLUS Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxolane], 1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-4',5'-di-2-propenyl-, (4'R,4aS,5'R)-(9CI) (CA INDEX NAME)

858371-51-4 CAPLUS Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-4',5'-di-2-propenyl-, (4'R,4aS,5'R)- (9CI) (CA INDEX NAME)

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786708-14-3 CAPLUS Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 4'-ethenyl-1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-, (2'R,4'S,4aS)- (CA INDEX NAME)

786708-15-4 CAPLUS

Spiro(cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 4'-ethenyl-1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-, (2'S,4'S,4aS)- (CA INDEX

Absolute stereochemistry.

786708-16-5 CAPLUS
Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 4'-ethenyl-1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-, (2'R,4'R,4aS)- (CA INDEX NAME)

Absolute stereochemistry.

786707-63-9 786708-10-9 786708-11-0
786708-14-3 786708-15-4 786708-16-5
786708-17-6 786708-12-7 786708-19-9
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786708-20-4 787620-90-1 786708-10-4
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786373-15-4 786708-90-1 786708-10-4
786373-15-4 786708-90-1 786708-10-4
786373-15-4 786708-90-1 786708-10-4
786307-63-9 CAPUS
Spiro(SH-benzi[finado]e-5,2'-[1,3]dioxolane], 1-(4-fluorophenyl)1,4,40,6,7,8-hexahydro-4',40,5'-trimethyl-, (4'R,408,5'R)- (CA INDEX
NAME)

Absolute stereochemistry.

786708-10-9 CAPLUS Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxolane], 1-{4-fluorophenyl}-4,4a,6,7-tetrahydro-4a-methyl-4',5'-diphenyl-, (4'R,4as,5'R)- (CA INDEX NAME)

Absolute stereochemistry.

786708-11-0 CAPLUS Spiro[cyclopent(f]indazole-5 (1H),2'-[1,3]dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',5'-bis(methoxymethyl)-4a-methyl-, (4'R,4aS,5'R)-(CA INDEX NAME)

Absolute stereochemistry.

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786708-17-6 CAPLUS Spiro[cyclopent(f]indazole-5[1H],2'-[1,3]dioxolane], 4'-ethenyl-1-[4-fluorophenyl]-4,4a,6,7-tetrahydro-4a-methyl-, (2'8,4'R,4a8)- (CA INDEX NAME)

786708-18-7 CAPLUS

'sorverie' | CAPUS Spiro[cyclopent[f]indazole-5(1H).2'-[1,3]dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-4'-phenyl-, (2'S,4'R,4aS)- (CA INDEX NAME)

Absolute stereochemistry.

786708-19-8 CAPLUS Spiro[cyclopent [f]indazole-5(1H),2'-[1,3]dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tecrahydro-4a-methyl-4'-phenyl-, (2'R,4'R,4a8)- (CA INDEX NAME)

Absolute stereochemistry.

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786708-20-1 CAPLUS
Spiro[cyclopent[f]indazole-5(1H),2'-{1,3}dioxolane}, 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-4'-phenyl-, (2'R,4'S,4aS}- (CA INDEX NAME)

Absolute stereochemistry.

786708-21-2 CAPLUS
Spiro(cyclopent[f]indazole-5(1H),2'-{1,3}dioxolane}, 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a-methyl-4'-phenyl-, (2'5,4'5,4a5)- (CA INDEX NAME)

786708-34-7 CAPLUS

Spiro(cyclopent[f]indazole-5(1H),2'-[1,3]dioxane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4a,5',5'-trimethyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

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Absolute stereochemistry.

787620-02-4 CAPLUS

Spiro(cyclopent(f]) indazole-5(1H),2'-[1,3] dioxolane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',4a,5'-trimethyl-, (4'R,4aS,5'R)- (CA INDEX NAME)

Absolute stereochemistry.

787620-09-1 CAPLUS Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxane], 1-(4-fluorophenyl)-4,48,6;7:tetrahydro-4',48,6'-trimethyl-, (4'R,488,6'R)- (CA INDEX NAME)

Absolute stereochemistry.

787620-10-4 CAPLUS Spiro[cyclopent]indazole-5(1H),2'-[1,3]dioxane], 1-(4-fluorophenyl)-4,4a.6,7-tetrahydro-4',4a.6'-trimethyl-, (4'8,4a8,6'8)- (CA INDEX NAME)

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786708-36-9 CAPLUS Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxane], 1-[4-fluorophenyl]-4,4a,6,7-tetrahydro-4',4',4a,6'-tetramethyl-, (2'S,4aS,6'R)- (CA INDEX NAME)

787619-93-6 CAPLUS Spiro[5H-benz[f] indazole-5,2'-[1,3] dioxolane], 1-(4-fluorophenyl)-1,4,4a6,6,7,8-hexahydro-4a-methyl-4',5'-diphenyl-, (4'R,4a8,5'R)- (CA INDEX NAME)

787620-00-2 CAPLUS Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxane], 1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4',4a,6'-trimethyl-, (4'R,4aS,6'R)- (CA INDEX NAME)

10551933

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Absolute stereochemistry

858371-54-7 CAPLUS Spiro[cyclopent[f]indazole-5[1H],2'-[1,3]dioxane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',4a-dimethyl-, (2'S,4'R,4aS)- (CA INDEX NAME)

Absolute stereochemistry.

858371-55-8 CAPLUS Spiro[cyclopent{f]indazole-5(1H),2'-{1,3}dioxane}, 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',4a-dimethyl-, (2'R,4'S,4aS)- (CA INDEX NAME)

858371-57-0 CAPLUS
Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxane], 1-(4-fluorophenyl)-4,4a,6,7-tetrahydro-4',4',4a,6',6'-pentamethyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry,

786708-00-7P 786708-30-3P ΙT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (novel ketal ligands for glucocorticoid receptor and in vitro and in

vivo activity) 786708-00-7 CAPLUS Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxane], 1-(4-fluoropheny1)-1,4,48,6,7,8-hexahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

786708-30-3 CAPLUS
Spiro[cyclopent[f]indazole-5(1H),2'-[1,3]dioxane], 1-(4-fluorophenyl)4,4a.6,7-tetrahydro-4a-methyl-, (4aS)- (CA IMDEX NAME)

10551933

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Title compds. represented by the formula I [wherein J = NR1, CR1R2; K = NR3, CR3R4; L = NR5, CR3R6; X = hydroxy, alkoxy, carbamoyl, etc.; R1-R6 = independently H, halo, (cyclo)alkyl, etc.; R7 = H, hydroxy, alkoxy, aryl, etc.; R8 = (cyclo)alkyl, alkenyl, alkynyl, etc.; R9, R10 = independently halo, hydroxy, alkyl, alkenyl, alkoxy; n = 0-2; and pharmaceutically acceptable salts or hydrates thereof) were prepared as selective non-steroidal glucocorticoid receptor modulators. For example, II was given in a multisteps synthesis starting from 1-(4-fluorophenyl)-4, A6, 5,7 tetrahydro-4a-methyl-cyclopent[flindazol-5(1H)-one reacting with phenylethynylmagnesium bromide. I showed affinity of glucocorticoid receptor with IC50 values between 10 µM and 1 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of a variety of autoimmune and inflammatory diseases or conditions.

51:762-39-1P
REL RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation), RACT (Reactant or reagent) [Findazol-5-yl and benz[f]indazol-5-yl derivs. as selective non-steroidal glucocorticoid receptor modulators)

61:762-99-1 CAPLUS

Spiro[5H-benz[f]indazol-5,2*-[1,3]dioxolane], 1-(4-fluorophenyl)-1,4,4a,6,7,8-bexahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

intermediate

CAPLUS COPYRIGHT 2007 ACS on ST

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

7004_270010 CAPLUS Full_text

140:287380

Preparation of octahydro-2-H-naphtho[1,7-1]indole-4-carboxamide
derivatives as selective glucocorticoid receptor modulators for the
treatment of autoimmune and inflammatory conditions
Ali. Anjad; Aster. Susan D., Balkovec. Janes M.; Graham, Donald W.; Hunt,
Julianne A.; Kallashi, Florida; Sinclair, Peter J.; Tata, James R.;
Taylor, Gayle E.; Goulet, Joung L.
Merck & Co., Inc., USA
PCT Int. Appl., 170 pp.
CODEN: PIXXD2
Patent

Patent English

PATENT NO. DATE APPLICATION NO. KIND WO 2004026248 A2 20040401

DATE WO 2003-US29494 20030917 10551933 14 of 22

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD NO. CONTROL OF THE PROPERTY OF THE PRO 6 CAPLUS COPYRIGHT 2007 ACC

141:20743

Preparation of cyclopent[f] indazole and benz[f] indazole derivatives selective non-sterology glucocorricular selective modulators
Ali, Amjad, Beresis, Richard, Colletti, Steven L.; Graham, Donald W.;
Tata, James R.; Thompson, Christopher F.
Merck & Co. Inc., USA
PCT Int. Appl., 105 pp.
CODEN: PIXXD2
Patent
Patent

| LA | Eng | 31 i sh | | | | | | | | | | | | | | | | | |
|------|---------------|--------------------------|------|-------------|-----|----------------------------|----------------|------|----------------|-----------------|----------|----------|----------|-----|-----|----------|-----|-----|--|
| FAN. | CNT | 1 | | | | | | | | | | | | | | | | | |
| | PATENT NO. | | | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
| | | | | | | | | | | | | | | | | | | | |
| PI | WO 2004075840 | | | A2 20040910 | | | WO 2004-US5199 | | | | | | 20040220 | | | | | | |
| | WO | 2004 | 0758 | 40 | | A3 | | 2005 | 0203 | | | | | | | | | | |
| | WO | 2004 | 0758 | 40 | | A9 | | 2005 | 0804 | | | | | | | | | | |
| | | ₩: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, | |
| | | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | ıs, | JP, | KE, | KG, | KΡ, | KR, | KZ, | LC, | |
| | | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NA, | NI | |
| | | RW: | BW, | GH, | GM, | KE, | LS, | MN, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | |
| | | | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | |
| | | | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | |
| | | | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | |
| | ΑU | AU 2004216182 | | | | A1 20040910 | | | AU 2004-216182 | | | | | | | 20040220 | | | |
| | CA | CA 2516684 EP 1599201 | | | | A1 20040910 A2 20051130 | | | | CA 2 | 20040220 | | | | | | | | |
| | EP | | | | | | | | - 1 | EP 2 | 004- | 20040220 | | | | | | | |
| | | R: | AT, | BE, | CH, | DΕ, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NIL, SE, MC,

JE, SIL LTT, LU, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2006014120 A1

PRAI US 2003-450811P P

NO 2004-USS199 W

MARPAT 141:260743

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2004026248 A3 2v.

W: AE, AG, AL, AM, AT, AU, AZ,
CO, CR, CU, CZ, DE, DK, DM, DZ, BL
GH, MM, HR, HU, ID, IL, IK, IS, JP, KE,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, ML
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZM
RM, GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZM, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GO, GM, HL, MR, NE, SN, TD, TG
CA 2499150 A1 20040401 A2 2003-249550 20030917
AU 2003270783 A1 200404061 AU 2003-270783 20030917
BP 1542996 A2 20056622 BP 2003-752495 20030917
CP 200505107 T 20060126 JP 2004-568945 20030917
T^5245588 A1 20051103 US/PD5-527615 20050311 10551933 PRAI .US 2002-412231P US 2003-476079P WO 2003-US29494

Octahydro-2-H-naphtho[1,2-f]indole-4-carboxamide derivs. I (X = CO, NRCO, CONH, NR, CH2NH; Rl,R2 = H, alkyl, alkenyl, cycloalkyl, alkoxy, aryl; R3 = alkyl, alkoxy, acid, halogen substituted alkyl; R4 = alkyl, alkenyl, cycloalkoxy, alkoxy, aryl) were prepared as selective glucocorticoid receptor modulators for the treatment of autoimmune and inflammatory conditions. Thus, (S)-Wieland-Miescher ketone was protected as the ketal using p-toluene sulfonic acid and ethylene glyclol and then treated with Et formate to give the hydroxymethylene ketal derivative. The hydroxymethylene was dissolved in acetic acid and reacted with p-fluorophenyl hydraxine hydrochloride to give. If the ketal of II was converted to the ketone using 6N HCl, and the resulting ketone transformed into the triflate. The triflate was treated with tributylvinyl tin and PPh1 to give the corresponding coupling product. Treatment with ethyl-4.4.4 trifluorocrotomate followed by dropwise addition of BCl3 gave the target I (R1 = CP3, R2, R3 = H, X = CO, R4 = OEt), 614762-99-1F
RU. RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

11

(preparation of octahydronaphthoindole-4-carboxamide derivs. as selective glucocorticoid receptor modulators for the treatment of autoimmune and inflammatory conditions) 614762-99-1 CAPUUS Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxolane], 1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN 2004:267662 CAPLUS Pull-text
141:7063
Novel N-Arylpyrazolo[3, 2-c]-Based Ligands for the Glucocorticoid Receptor: Receptor Binding and in Vivo Activity
Ali, Amjad; Thompson, Christopher F., Balkovec, James M., Graham, Donald W., Hammond, Milton L., Quraishi, Nazia, Tata, James R., Einstein, Monica, Ge, Lan, Harris, Georglanna; Kelly, Terri M., Mazur, Paul, Pandit, Shilpa; Santoro, Joseph; Stitani, Ayesha, Mang, Chuanlin, Milliamson, Joanne; Miller, Douglas K.; Thompson, Chris M., Zaller, Dennis M., Forrest, Michael J., Carballo-Jane, Ester; Luelf, Silvi Departments of Medicinal Chemistry, Métabolic Disorders Immunonology and Pharmacology, Merck Research Labpratories, Rahway, N., 07065, USA JOUrnal of Medicinal Chemistry (1004), 47(10), 2441-2452
American Chemical Society
Journal

cs

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PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UA, UG, US, UZ, VC, VN, VU, ZA, ZM, ZM
RN: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FT, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CT, CM, GA, GM, GO, GM, ML, MR, NE, SN, TD, TG
CA 2481320 A1 20031023 CA 2003-2481320 20030408
AU 200322706 A1 20031023 CA 2003-2481320 20030408
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, ST, LT, V, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
JP 2005526315 T 20050922 JP 2003-18285
US 20025265115 B2 20071016
US 2002-371948P P 20020411
WO 2003-US10867 M 20030408
MARPAT 139:J23524 10551933 19 of 22

Benzindazoles I (n = 0-2; J, K, L = (un)substituted CH2, NH; X = bond, CO, (un)substituted NH, NHCO, 1,1-cyclopropanediyl; Rl, R2 = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, alkylthio, alkylsulfinyl, and alkylsulfinyl, arylary aralkyl, heterocyclic, aryloxy, arcyloxy, OH; R3 = H, (un)substituted OH, alkyl, aryl, aralkyl, Y = H, (un)substituted OH, 3H, S(OHH, SOZH, SOZH, MC2, ARY, CN, halogen, and the carbocyclic rings may be further substituted) were prepared for use as selective glucocorticoid receptor ligands for treating a variety of autoimmune and inflammatory diseases or conditions (no data). Thus, Wieland-Miescher ketone was ketalized, hydroxymethylenated, cyclized with 4-FCSHAMQCI to give the benzindazole II.
514762-99-19 614763-23-49
RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation), RACT (Reactant or reagent)
(preparation of 1H-benzo[f]indazol-5-yl derivs, as selective glucocorticoid

II

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A novel series of selective ligands for the human glucocorticoid receptor (MGR) are described. Preliminary structure-activity relationships were focused on substitution at C-1 and indicated a preference for 3-, 4-, and 5-substituted aromatic and benzylic groups. The resulting analogs, e.g., I (R - 0H, RI = 3,4,5-Meo(F2)CSH2, CR2CSH4F-41, exhibited excellent affinity for hGR (ICSO 1.9 nM and 2.8 nM, resp.) and an interesting partial agonist profile in functional assays of transactivation (tyrosine aminotransferase, TAT, and glutamine synthetase, GS) and transrepression (IL-6). The most potent compds. were I [R = 4-FCSH4, 2-thienyl, R1 = OH] These candidates showed highly efficacious IL-6 inhibition vs. dexamethasone. I [R = 2-thienyl, R1 = OH] was evaluated in vivo in the mouse LPS challenge model and showed an EDSO = 4.0 mg/kg, compared to 0.5 mg/kg for prednisolone in the same assay.

EL: RCT (Resectant), SPN (Synthetic preparation), PREP (Preparation), RACT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

18 of 22

(Reactant or reagent)
(preparation and glucocorticoid receptor binding of
(aryl(hydroxy)eethyl)naphthopyrazoles)
614762-99-1 CAPLUS

Spiro[5H-benz[f] indazole-5,2'-{1,3}dioxolane}, 1-(4-fluorophenyl)-1,4,4a,6,7,8-hexahydro-4a-methyl-, (4aS)- (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

را ا ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

2003:836773 CAPLUS Full-text

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Preparation of 1H-Benzo{f} indazol-5-yl derivatives as selective glucocorticoid receptor modulators Ali, Amjad; Balkovec, James M.; Graham, Donald M.; Thompson, Christopher F.; Ouraishi, Nazia Merck & Co., Inc., USA PCT Int. Appl., 233 pp. CODEN: PIXXD2 Patent English CNT I PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003086294 WO 2003086294

086294 A2 20031023 NO 2003-US10867 20030408
086294 A3 20040715
AE, AO, AL, AM, AT, AU, AZ, BA, BB, BO, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DX, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MM, MX, MZ, NI, NO, NZ, OM, PK,

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20 of 22

receptor modulators)
614762-99-1 CAPLUS
Spiro[5H-benz[f]indazole-5,2'-[1,3]dioxolane], 1-(4-fluorophenyl)1,4,4a,6,7.8-hexahydro-4a-methyl-, (4as)- (CA INDEX NAME)

Absolute stereochemistry.

61473-23-4 CAPLUS Spiro15H-benz[f]indazole-5,2'-oxirane], 1-(4-fluorophenyl)-1,4,4a,6,7,8-hoxahydro-4a-mechyl-, (4aR)- (CA INDEX NAME)

Absolute stereochemistry.

ANSMER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN 2003:590999 CAPLUS Full-text
139:149529
Preparation of non-steroidal ligands for the glucocorticoid receptor Scanlan, Thomas S., Shah, Nilesh
The Regents of the University of California, USA
PCT Int. Appl., 70 pp.
CODEN: PIXXD2
Patent

- no origination of adult - no origination of something - synthesis Lie of synth DN TI IN PA SO

DT Patent English

PATENT NO. DATE DATE APPLICATION NO. KIND 061651 A1 20030731 M0 2003-US1997 20030122 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, 18, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MG, MK, MZ, MO, NZ, MA, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, WO 2003061651

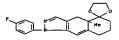
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| | | | UA, | UG, | UZ, | VC, | VN. | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ. | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, | |
| | | | KG, | ΚZ, | MD, | Rυ, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | |
| | | | FI, | FR, | GB, | GR, | ΗU, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | SI, | SK, | TR, | BF, | |
| | | | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | G₩, | ML, | MR, | NE, | SN, | TD, | TG | | |
| | CA 2473886 | | | | | | | 2003 | 0731 | CA 2003-2473886 | | | | | | 20030122 | | | |
| | US 2003176478 | | | | | | 20030918 US 2003-350260 | | | | | | | | | 20030122 | | | |
| | US 6831093 | | | | | B2 | B2 20041214 | | | | | | | | | | | | |
| | | | | | | | | | | | EP 2003-710722 | | | | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙT, | LI, | LU, | NL, | SE, | MC, | PT, | |
| | | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | | |
| JP 2005523254 | | | | | | T | | 2005 | 0804 | | JP 2 | 003- | 5615 | 95 | | 2 | 0030 | 122 | |
| | | 2005 | | | | | | 2005 | 0310 | | US 2 | 004- | 9722 | 50 | | 2 | 0041 | 022 | |
| PRAI | ŲS | 2002 | -351 | 4 B 4 P | | ₽ | | 2002 | 0122 | | | | | | | | | | |
| | US | 2002 | -373 | 757P | | P | | 2002 | 0417 | | | | | | | | | | |
| | US | 2003 | -350 | 260 | | A3 | | 2003 | 0122 | | | | | | | | | | |
| | MO | 2003 | -US1 | 997 | | W | | 2003 | 0122 | | | | | | | | | | |
| os | MARPAT 139:149523 | | | | | | | | | | | | | | | | | | |

Naphthoheterocycles I (A. B. D = C. N. O. S. at least one of A. B. and D being N. O. or S. W = C. O. N. S. RI = H. (uni)substituted alkyl. acyl. NN2. CO2H, aralkyl. CONH2. heterocyclic, CN. halogen, R2. R3. R5. R6. R6'. R7 = H. (uni)substituted alkyl. acyl. alkoxy. NN2. sulfonyl. sulfinyl. SH. CO2H, aralkyl. CONH2. heterocyclic, OH, CN. halogen, R2'. R3'. R5'. R7'. R8 = absent or H. (uni)substituted alkyl. acyl. NH2. alkoxy. sulfonyl. sulfinyl. SH, aralkyl. CONH2. heterocyclic, CN, halogen, R4 = absent or H. (uni)substituted alkyl. acyl. RN2. alkoxy. sulfonyl. sulfinyl. SH. aralkyl. acyl. NH2. CO2H, aralkyl. CO2H, CN, halogen, R9 = absent or H. (uni)substituted alkyl. alkoxy. SH12. CO2H, CN, halogen, O. S. OH; R10 = absent or H. (uni)substituted alkyl. acyl. CO2H, CN, halogen, O. S. OH; R10 = absent or H. (uni)substituted alkyl. acyl. CO2H, CN, halogen, O. S. Hy. R10 = aralkyl. CONH2, heterocyclic, CRR10 = atoms required to form a ring; R11: R12 = H. (uni)substituted alkyl. acyl. NH2, alkoxy, sulfonyl, sulfinyl, SH, aryl, aralkyl, CONH2, heterocyclic, OH, CN, halogen, O. S! were prepared as non-steroidal ligands for the glucocorticoid receptor. They are useful for treating or preventing diseases (e.g., obesity, diabetes, depression, neurodegeneration of an inflammatory disease) associated with glucocorticoid binding to the glucocorticoid receptor. Thus, Wieland-Miescher ketone was

10551933 22 of 22

1933 22 ochwerted to its 5-ethyleneketal, hydroxymethylenated, and cyclized with 4-PC6H4NHNH2 to give the benzindazolone II which had ICSO of 436 nM in a glucocorticoid receptor binding test.
571202-14-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of non-steroidal ligands for the glucocorticoid receptor)
571203-14-0 CAPLUS
Spiro[SH-benz[f]indazole-5,2'-[1,3]dioxolane]; 1-(4-fluorophenyl)1,4,4a,6,7,8-hexahydro-4a-methyl- (CA INDEX NAME)



THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE.CNT 2

=> log hold COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION 212.17 ENTRY 34.92 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY -5.46 SESSION CA SUBSCRIBER PRICE -5.46

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 05:39:23 ON 28 NOV 2007